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Г	L1	(pdgf adj c or fallotein or scdgf adj b or pdgf adj d)	124

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DB=EPAB,JPAB,DWPI; PLUR=YES; OP=OR

L9 (zvegf4 or pdgf adj c or fallotein or scdgfb or scdgf adj b or pdgf adj d)

29

END OF SEARCH HISTORY

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DATE: Friday, December 16, 2005

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Γ	L8	L7 and (zvegf4 or pdgf adj c or fallotein or scdgfb or scdgf adj b or pdgf adj d)	30
Γ	L7	GILBERTSON	1109
Ľ	L6	L5 and (zvegf4 or pdgf adj c or fallotein or scdgfb or scdgf adj b or pdgf adj d)	6
<u> </u>	L5	TOPOUZIS	15
Γ.	L4	L2 and (zvegf4 or pdgf adj c or fallotein or scdgfb or scdgf adj b or pdgf adj d)	31
Γ	L3	L2 and (zvegf4 or pdgf adj c or falltein or scdgfb or scdgf adj b or pdgf adj d)	31
Γ	L2	HART	31570
	L1	5094941	42

END OF SEARCH HISTORY

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                MATHDI removed from STN
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                 CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                 to core patent offices
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                 visualization tools
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                EPFULL enhanced with additional content
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NEWS 11 NOV 14
NEWS 12 NOV 30 REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                 spectral property data
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        DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
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         DEC 14 CA/CAplus to be enhanced with updated IPC codes
NEWS 16
NEWS EXPRESS DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
              V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
              http://download.cas.org/express/v8.0-Discover/
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65 L1 AND ANTIBOD? L2

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41 DUP REM L2 (24 DUPLICATES REMOVED)

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ANSWER 30 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:540192 CAPLUS

DOCUMENT NUMBER: 137:104171

PDGF D polypeptides, nucleic acids TITLE:

> encoding them, and therapeutic or diagnostic applications of the polypeptides or their

antibodies

INVENTOR(S): Shimkets, Richard A.; Lichenstein, Henri; Herrmann,

John L.; Boldog, Ferenc L.; Minskoff, Stacey; Jeffers, Michael; Andrews, David; La Rochelle, William

PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 97 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 715,332.

CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 160

| PATENT | NO. | | | KIN | D : | DATE | | ; | APPL: | ICAT: | ION I | NO. | | D. | ATE | |
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| US 2002 | 0945 | 46 | | A1 | | 2002 | 0718 | 1 | US 2 | 001- | 7754 | 82 | | 2 | 0010 | 202 |
| WO 2002 | 0596 | 18 | | A2 | | 2002 | 0801 | 1 | WO 2 | 001-1 | US48 | 901 | | 2 | 0011 | 116 |
| WO 2002 | 0596 | 18 | | A3 | | 2003 | 0508 | | | | | | | | | |
| ₩: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
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| | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, | LK, | LR, |
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| | KG, | ΚZ, | MD, | RU, | TJ, | TM, | ΑT, | BE, | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, |
| | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, |
| | GN, | GQ, | GW, | ML, | MR, | ΝE, | SN, | TD, | TG | | | | | | | |

PRIORITY APPLN. INFO.:

US 1999-158083P P 19991007

US 1999-159231P P 19991013

US 2000-174485P P 20000104

US 2000-186707P P 20000303

US 2000-188250P P 20000310

US 2000-223879P P 20000808

US 2000-234082P P 20000920

US 2000-688312 A2 20001013

US 2000-715332 A2 20001116

AΒ Disclosed are novel PDGFD nucleic acids encoding proteins and polypeptides related to bone morphogenetic protein-1 (BMF1), to vascular endothelial growth factor E (VEGF-E) and to platelet derived growth factor (PDGF). Also disclosed are vectors, host cells, antibodies, and recombinant methods for producing these nucleic acids and polypeptides. Methods of use include detecting and staging of cancers. The claims of this continuation-in-part patent specifically claim a method of detecting the presence of at least one PDGFD antigen in a sample, comprising the steps of: (a) providing a biol. sample; (b) contacting the sample with an agent that binds the antigen; and (c) detecting the presence of the agent bound to the antigen; whereby the presence of the agent indicates that the antigen is present in the sample. A method contributing to a diagnosis of cancer in a subject based on the presence of a PDGFD antigen in a sample from the subject is also claimed, as is a method of staging cancer in a subject. Addnl. claimed are a method of phosphorylating a tyrosine residue of a cellular receptor comprising the step of contacting a cell harboring the receptor with a PDGFD polypeptide, a method of stimulating a response in a cell that is specific for a PDGF beta receptor comprising contacting the cell with a PDGFD polypeptide, and a method of inhibiting the growth of a cell by contacting the cell with an agent that specifically binds a PDGFD polypeptide. An isolated nucleic acid comprising a sequence encoding a PDGFD polypeptide and a method of preparing the PDGFD polypeptide are also claimed.

L3 ANSWER 31 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2

2002:409185 CAPLUS

DOCUMENT NUMBER:

137:5012

TITLE:

Anti-zveqf4 antibodies,

zveqf4 antagonists, and antisense

polynucleotides for treating fibroproliferative

disorders

INVENTOR(S):

Hart, Charles E.; Topouzis, Stavros; Gilbertson, Debra

G.

PATENT ASSIGNEE(S):

USA

SOURCE:

USA

SOURCE:

U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S.

Ser. No. 564,595.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| US 2002064832 | A1 | 20020530 | US 2001-808972 | 20010314 |
| US 6630142 | B2 | 20031007 | | |
| US 6495668 | B1 | 20021217 | US 2000-564595 | 20000503 |
| US 2004002140 | A1 | 20040101 | US 2001-876813 | 20010606 |
| US 6962802 | B2 | 20051108 | | |
| US 2003105015 | A1 | 20030605 | US 2002-226559 | 20020823 |
| US 6866991 | B2 | 20050315 | | |
| US 2004043027 | Al | 20040304 | US 2003-606055 | 20030625 |
| US 2004242850 | Al | 20041202 | US 2004-877623 | 20040625 |
| US 2005031694 | A1 | 20050210 | US 2004-910938 | 20040803 |
| US 2005164937 | A1 | 20050728 | US 2005-80803 | 20050315 |

US 1999-132250P P 19990503 US 1999-164463P P 19991110 US 2000-180169P P 20000204 US 2000-564595 A2 20000503 US 2000-235295P P 20000926 US 2000-540224 A3 20000331 US 2001-808972 A3 20010314 US 2001-876813 A3 20010606 US 2002-226559 A1 20020823 PRIORITY APPLN. INFO.:

Materials and methods for reducing cell proliferation or extracellular AB matrix production in a mammal are disclosed. The methods comprise administering to a mammal a composition comprising a therapeutically effective amount of a zveqf4 protein antagonist in combination with a pharmaceutically acceptable delivery vehicle. Exemplary zvegf4 antagonists include anti-zvegf4 antibodies, inhibitory polynucleotides, inhibitors of zvegf4 activation, and mitogenically inactive, receptor-binding variants of zvegf4. The materials and methods are useful in the treatment of, inter alia, fibroproliferative disorders of the kidney, liver, and bone.

DUPLICATE 7 L3 ANSWER 32 OF 41 MEDLINE on STN

ACCESSION NUMBER: 2002242895 MEDLINE DOCUMENT NUMBER: PubMed ID: 11980634

Platelet-derived growth factor D: tumorigenicity in mice TITLE:

and dysregulated expression in human cancer.

LaRochelle William J; Jeffers Michael; Corvalan Jose R F; AUTHOR: Jia Xiao-Chi; Feng Xiao; Vanegas Sandra; Vickroy Justin D;

Yang Xiao-Dong; Chen Francine; Gazit Gadi; Mayotte Jane; Macaluso Jennifer; Rittman Beth; Wu Frank; Dhanabal Mohan;

Herrmann John; Lichenstein Henri S

CuraGen Corp., Branford, Connecticut 06405, USA.. CORPORATE SOURCE:

wlarochelle@curagen.com

Cancer research, (2002 May 1) 62 (9) 2468-73. SOURCE:

Journal code: 2984705R. ISSN: 0008-5472.

PUB. COUNTRY: United States

United States
Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTRY MONTH: 200205

Entered STN: 20020501 ENTRY DATE:

> Last Updated on STN: 20020602 Entered Medline: 20020531

Platelet-derived growth factor (PDGF) has been directly implicated in AB developmental and physiological processes, as well as in human cancer and other proliferative disorders. We have recently isolated and characterized a novel protease-activated member of the PDGF family, PDGF D. PDGF D has been shown to be proliferative for cells of mesenchymal origin, signaling through PDGF receptors. Comprehensive and systematic PDGF D transcript analysis revealed expression in many cell lines derived from ovarian, renal, and lung cancers, as well as from astrocytomas and medulloblastomas. beta PDGF receptor profiling further suggested autocrine signaling in several brain tumor cell lines. PDGF D transforming ability and tumor formation in SCID mice was further demonstrated. Exploiting a sensitive PDGF D sandwich ELISA using fully human monoclonal antibodies, PDGF D was detected at elevated levels in the sera of ovarian, renal,

lung, and brain cancer patients. Immunohistochemical analysis confirmed PDGF D localization to ovarian and lung tumor tissues. Together, these data demonstrate that PDGF D plays a

role in certain human cancers.

MEDLINE on STN ANSWER 33 OF 41 ACCESSION NUMBER: 2002667552 MEDLINE **DUPLICATE 8**

PubMed ID: 12427128 DOCUMENT NUMBER:

Platelet-derived growth factor-D expression in developing TITLE:

and mature human kidneys.

Changsirikulchai Siribha; Hudkins Kelly L; Goodpaster Tracy AUTHOR:

A; Volpone John; Topouzis Stavros; Gilbertson Debra G;

Alpers Charles E

Department of Medicine, Srinakharinwirot University, CORPORATE SOURCE:

Bangkok, Thailand. DK47959 (NIDDK)

CONTRACT NUMBER:

Kidney international, (2002 Dec) 62 (6) 2043-54.
Journal code: 0323470. ISSN: 0085-2538. SOURCE:

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

English LANGUAGE:

Priority Journals FILE SEGMENT: OTHER SOURCE: GENBANK-AF336376

200305 ENTRY MONTH:

Entered STN: 20021113 ENTRY DATE:

> Last Updated on STN: 20030524 Entered Medline: 20030523

BACKGROUND: Platelet-derived growth factor (PDGF) is a family of growth AB regulatory molecules composed of sulfide-bonded dimeric structures. Two well-studied PDGF peptides (PDGF-A and PDGF-B) have been shown to mediate a wide range of biological effects. PDGF-D is a newly recognized member of the PDGF family. Initial studies of the PDGF -D gene found its expression in cells of the vascular wall, suggesting that it could participate in vascular development and pathology. However, its localization in human kidney tissues has never been studied. METHODS: PDGF-D expression in fetal (N = 30) and adult (N = 25) human kidney tissues was examined by immunohistochemistry using an affinity-purified antibody raised to human PDGF-D. Antibody absorption with the immunizing peptide was employed to confirm the specificity of this antibody. PDGF-D protein and gene expression in human kidneys also were demonstrated by Western blotting and reverse transcription-polymerase chain reaction (RT-PCR). RESULTS: In the developing kidney, PDGF-D was first expressed by epithelial cells of comma- and S-shaped structures of the developing nephron, and most consistently in the visceral epithelial cells in the later stages of glomerular differentiation. In addition, PDGF-D could be found in mesenchymal, presumptively fibroblast cells in the interstitium of developing renal pelvis and in fetal smooth muscle cells in arterial vessels. In the adult normal kidney, PDGF-D was expressed by the visceral epithelial cells. There was persistent expression in arterial smooth muscle cells as well as in some neointimal smooth muscle cells of arteriosclerotic vessels, and expression in smooth muscle cells of vasa rectae in the medulla. PDGF-D could be identified at the basolateral membrane of some injured tubules in areas of chronic tubulointerstitial injury routinely encountered in aging kidneys. Western blotting of homogenates of adult kidneys demonstrated monospecific bands at 50 kD corresponding to previously established size parameter for this protein. RT-PCR of human kidney RNA resulted in a 918 basepair band, the sequence of which corresponded to human PDGF-D (Genbank number AF336376). CONCLUSIONS: To our knowledge, these are the first studies to localize PDGF-D in human kidneys and suggest that PDGF-D may have a role in kidney development. PDGF-D was shown to bind to PDGF beta receptor, which localizes to mesangial cells, parietal epithelial cells, and interstitial fibroblasts, suggesting potential paracrine interactions between those

ANSWER 34 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN 2002:231900 CAPLUS ACCESSION NUMBER:

cells and the visceral epithelium.

137:227182 DOCUMENT NUMBER: Mice with Cre recombinase activatable PDGF-TITLE: C expression AUTHOR (S): Ding, Hao; Wu, Xiaoli; Nagy, Andras Samuel Lunenfeld Research Institute, Mount Sinai CORPORATE SOURCE: Hospital, Toronto, ON, M5G 1X5, Can. Genesis (New York, NY, United States) (2002), 32(2), SOURCE: 181-183 CODEN: GNESFY; ISSN: 1526-954X PUBLISHER: Wiley-Liss, Inc. Journal DOCUMENT TYPE: LANGUAGE: English The recent discovery of two new platelet-derived growth factor (PDGF) family members, PDGF-C and PDGF-D, suggests that the functional complexity of the PDGF family is larger than previously thought. To analyze the consequences of ectopic or overexpression of PDGF-C, the authors present the establishment of conditional transgenic mice that express PDGF-C in a Cre-excision conditional manner. Western blot anal. with anti-Flag antibody showed two PDGF-C isoforms in double transgenic embryos, i.e., the full-length 55 kDa and the protease-activated 23 kDa isoform. Preliminary observation of midgestation double transgenic embryos indicated that biol. activity of transgenic PDGF-C caused developmental defects, including facial abnormalities. THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 13 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 35 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN L3 2001:300544 CAPLUS ACCESSION NUMBER: 134:325212 DOCUMENT NUMBER: TITLE: Method of treating fibrosis Gilbertson, Debra G. INVENTOR(S): Zymogenetics, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 70 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| | PATENT NO. | | | | | | KIND DATE | | | | APPLICATION NO. | | | | | | DATE | | | |
|-------|------------|------|-------|------|------|-------|-----------|-------|-------|------|-----------------|--------|-------|------|----------|-----|------|-----|--|--|
| | WO | 2001 | 02858 | 36 | | A1 | - | 20010 |)426 | | | | | 270 | 20001023 | | | | | |
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| | US | 2005 | 0492 | 18 | | A1 | | 2005 | 0303 | | | 2004- | | | | _ | 0040 | | | |
| PRIOR | ZTI | APP | LN. : | INFO | . : | | | | | | | 1999- | | | - | | 9991 | | | |
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Materials and methods for treating fibrosis in a mammal are disclosed. AB The methods comprise administering to a mammal a composition comprising a therapeutically effective amount of a zvegf3 antagonist in combination with a pharmaceutically acceptable delivery vehicle. Zvegf3 antagonists include anti-zvegf3

antibodies, mitogenically inactive receptor-binding zvegf3 variant polypeptides, and inhibitory polynucleotides. Within one embodiment of the invention the fibrosis is liver fibrosis.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 36 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:790635 CAPLUS

DOCUMENT NUMBER:

133:345605

TITLE:

Protein and cDNA sequences of novel human and mouse

vascular endothelial growth factor zvegf-4 and

diagonistic and therapeutic uses thereof

INVENTOR(S): Gilbert, Teresa; Hart, Charles E.; Sheppard, Paul O.; Gilbertson, Debra G.

PATENT ASSIGNEE(S): Zymogenetics, Inc., USA SOURCE: PCT Int. Appl., 143 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| | | | | | | | KIND DATE | | | | | | | | | | DATE | | |
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047 | | 2 | 0000 | 503 | |
| | WO | 2000 | 0667 | 36 | | B1 | | 2000 | 1221 | | | | | | | | | | |
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| | | 2370 | | | | AA | | | | | | 2000- | | | | | | | |
| | ΕP | 1177 | 293 | | | A1 | | 2002 | 0206 | | EP : | 2000- | 9289 | 93 | | 2 | 0000 | 503 | |
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| | US | 2003 | 1050 | 15 | | A 1 | | 2003 | 0605 | | US : | 2002- | 2265 | 59 | | 2 | 0020 | 823 | |
| | | 6866 | | | | | | 2005 | | | | | | | | | | | |
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| | US | 2005 | 1649 | 37 | | A1 | | 2005 | 0728 | | | 2005- | | | | | 0050 | | |
| PRIOR | RIT? | APP | LN. | INFO | .: | | | | | | | 1999- | | | | | .9990 | | |
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| AB | The | e pre | sent | inv | enti- | on p | rovi | des | prot | ein | and | CDNA | seq | uence | s fo | or a | new | тy | |

AB The present invention provides protein and cDNA sequences for a newly identified human and mouse vascular endothelial growth factor, designated zvegf-4, which is cloned from a human chronic myelogenous leukemia cell and mouse genomic library by its homol. to the VEGF family. The vascular endothelial growth factor zvegf-4 resides on human chromosome 11 at 11q22.3-q23.1. The invention also relates to the tissue distribution of zvegf-4 mRNA. The present invention also includes antibodies to zvegf-4. The sequences of zvegf-4, may be used for detecting human

disease associated with zvegf-4 activities, and as a therapeutic.

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 37 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN L3

ACCESSION NUMBER:

2000:535282 CAPLUS

DOCUMENT NUMBER:

133:145921

TITLE:

SOURCE:

Human platelet-derived growth factor/vascular

endothelial growth factor-like growth factor H, its

cDNA sequences and therapeutic applications

Eriksson, Ulf; Alitalo, Kari; Lauren, Juha INVENTOR(S):

PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, USA; Helsinki

University Licensing Ltd.

PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|-------|----------|-----------------|----------|
| | | | | |
| WO 2000044903 | A1 | 20000803 | WO 2000-US1895 | 20000128 |
| W. AII CA CN | א סד. | NZ. IIS | | |

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

PT, SE

EP 1147193 **A**1 20011024 EP 2000-915701 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 2002535006 T2 20021022 JP 2000-596145 P 19990129 PRIORITY APPLN. INFO.: US 1999-117864P WO 2000-US1895 W 20000128

A portion of the PDGF/VEGF-Like Growth Factor H, a new member of the VEGF AB family of growth factors, is described, as well as its cDNA sequences. Methods for expressing and producing it, analyzing its function, preparing its antibodies and screening for its antagonists for medical and diagnostic applications are also provided. THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

3

ACCESSION NUMBER:

REFERENCE COUNT:

ANSWER 38 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN 2000:401998 CAPLUS

DOCUMENT NUMBER:

TITLE:

133:38714

ZVEGF3: a homolog of vascular endothelial

growth factor and its use

INVENTOR(S):

Gao, Zeren; Hart, Charles E.; Piddington, Christopher

S.; Sheppard, Paul O.; Shoemaker, Kimberly E.;

Gilbertson, Debra G.; West, James W.

PATENT ASSIGNEE(S):

Zymogenetics, Inc., USA PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT: 4

| PATENT NO. | KIND DAT | TE APPL | ICATION NO. | DATE |
|----------------|------------|----------------|-----------------|-------------|
| | | | | |
| WO 2000034474 | A2 200 | 000615 WO 1 | 999-US28968 | 19991207 |
| WO 2000034474 | A3 200 | 001228 | | |
| WO 2000034474 | C2 200 | 20829 | | |
| W: AE, AL, AM, | AT, AU, AZ | Z, BA, BB, BG, | BR, BY, CA, CH, | CN, CR, CU, |
| CZ, DE, DK, | DM, EE, ES | S, FI, GB, GD, | GE, GH, GM, HR, | HU, ID, IL, |
| IN, IS, JP, | KE, KG, KP | R, KR, KZ, LC, | LK, LR, LS, LT, | LU, LV, MD, |

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MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                 20000615
                                              CA 1999-2354325
                                                                       19991207
     CA 2354325
                           AΑ
                           A2
                                 20011004
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                                                                       19991207
     EP 1137773
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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                                 20020924
                                              JP 2000-586908
                                                                       19991207
     JP 2002531127
                           T2 .
     AU 764039
                           B2
                                 20030807
                                              AU 2000-21679
                                                                       19991207
     AU 2000021679
                           A5
                                 20000626
     US 2003087870
                                              US 2002-264361
                                                                       20021003
                           A1
                                 20030508
                                              US 2004-938375
                                                                       20040910
     US 2005049218
                           A1
                                 20050303
PRIORITY APPLN. INFO.:
                                              US 1998-207120
                                                                   A 19981207
                                              US 1999-142576P
                                                                   Ρ
                                                                      19990706
                                                                      19991021
                                              US 1999-161653P
                                                                   P
                                              US 1999-165255P
                                                                   P
                                                                       19991112
                                              WO 1999-US28968
                                                                   W
                                                                       19991207
                                              US 2000-22223P
                                                                   P
                                                                       20000801
                                                                   A1 20001023
                                              US 2000-695121
     A protein that shows sequence similarities to the vascular endothelial
AB
     growth factors and that may be of therapeutic use is identified and
     characterized using them are disclosed. The polypeptides comprises an
     amino acid segment that is at least 90% identical to residues 46-163 of
     SEQ ID NO:2 or residues 235-345 of SEQ ID NO:2. Multimers of the
     polypeptides are also disclosed. The polypeptides, multimeric proteins,
     and polynucleotides can be used in the study and regulation of cell and
     tissue development, as components of cell culture media, and as diagnostic
     agents. The gene was identified in public EST databases and a cDNA cloned
     by PCR from a human salivary gland cDNA library. Ectopic expression of
     the gene in transgenic mice using inducible promoters resulted in
     abnormalities of the liver, spleen and hematopoiesis. Similarly, mice
     infected with an adenovirus carrying the gene had enlarged livers with
     sinusoidal cell proliferation. The spleen was similarly affected and the
     mice showed abnormalities in platelet counts. The protein stimulated
     aortal outgrowth in vitro about as effectively as other growth factors
     tested with fibroblasts and smooth muscle cells being the most affected.
     The protein stimulated intracellular calcium release in these cells.
     ANSWER 39 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN
L3
ACCESSION NUMBER:
                          2000:335442 CAPLUS
DOCUMENT NUMBER:
                          133:1492
                          Human platelet-derived growth factor D, its cDNA
TITLE:
                          sequences, and uses thereof in medical and diagnostic
                          applications
                          Eriksson, Ulf; Aase, Karin; Ponten, Annica; Lee, Xuri;
INVENTOR (S):
```

Uutela, Marko; Alitalo, Kari; Oestman, Arne; Heldin,

Carl-Henrik

Ludwig Institute for Cancer Research, USA; Helsinki PATENT ASSIGNEE(S):

University Licensing Ltd. Oy (FI/FI)

PCT Int. Appl., 111 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

| PATENT | NO. | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D | ATE | |
|---------|------|-----|-----|-----------|-----|------|------|-----|-------|-------|------|-----|-----|-----|------|-----|
| | | | | | - | | | | | | | | | _ | | |
| WO 2000 | 0278 | 79 | | A1 | | 2000 | 0518 | | WO 1: | 999-1 | US26 | 462 | | 1: | 9991 | 110 |
| W: | ΑE, | AL, | AU, | BA, | BB, | BG, | BR, | CA, | CN, | CU, | CZ, | EE, | GD, | HR, | HU, | ID, |
| | IL, | IN, | IS, | JP, | KP, | KR, | LC, | LK, | LR, | LT, | LV, | MG, | MK, | MN, | MX, | NO, |

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NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                  20000518
                                            CA 1999-2349951
                                                                        19991110
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                           AΑ
                                  20010905
                                              EP 1999-958854
     EP 1129110
                           A1
                                                                        19991110
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2002534061
                           T2
                                  20021015
                                               JP 2000-581056
                                                                        19991110
                                  20030630
                                               NZ 1999-511379
     NZ 511379
                           Α
                                                                        19991110
     AU 770899
                           B2
                                  20040304
                                               AU 2000-16136
                                                                        19991110
                                                                    P 19981110
PRIORITY APPLN. INFO.:
                                               US 1998-107852P
                                                                    P 19981228
                                               US 1998-113997P
                                                                    P 19990826
                                               US 1999-150604P
                                                                    P 19991004
                                               US 1999-157108P
                                                                    P 19991005
                                               US 1999-157756P
                                                                   W 19991110
                                               WO 1999-US26462
     PDGF-D, a new member of the PDGF/VEGF family of growth
AΒ
     factors, is described, as well as the nucleotide sequence encoding it,
     methods for producing it, antibodies and other antagonists to
     it, transfected and transformed host cells expressing it, pharmaceutical
     compns. containing it, and uses thereof in medical and diagnostic
     applications.
REFERENCE COUNT:
                                 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 40 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN
L_3
                           2000:227431 CAPLUS
ACCESSION NUMBER:
                          132:261098
DOCUMENT NUMBER:
                          Human and murine platelet-derived growth factor C and
TITLE:
                          their cDNA sequences and biological activities
                          Eriksson, Ulf; Aase, Karin; Lee, Xuri; Ponten, Annica;
INVENTOR(S):
                          Uutela, Marko; Alitalo, Kari; Oestman, Arne; Heldin,
                          Carl-Henrik; Betsholz, Christer
                          Ludwig Institute for Cancer Research, USA; Helsinki
PATENT ASSIGNEE(S):
                          University Licensing Ltd.
                           PCT Int. Appl., 135 pp.
SOURCE:
                           CODEN: PIXXD2
DOCUMENT TYPE:
                           Patent
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                  DATE
                                               APPLICATION NO.
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                                  _____
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                                            WO 1999-US22668
     WO 2000018212
                          A2 20000406
         W: AE, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                  20000406
                                             CA 1999-2344561
     CA 2344561
                           AΑ
                                             EP 1999-952989
                                                                        19990930
     EP 1123408
                           A1
                                  20010816
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                           T2
                                  20020813
                                               JP 2000-571742
                                                                        19990930
     JP 2002525086
                                                                    P 19980930
                                               US 1998-102461P
PRIORITY APPLN. INFO.:
                                               US 1998-108109P
                                                                   P 19981112
                                               US 1998-110749P
                                                                   P 19981203
                                               US 1998-113002P P 19981218
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US 1999-135426P P 19990521

US 1999-144022P P 19990715 WO 1999-US22668 W 19990930

The invention provides isolated novel growth factors which have the ability to stimulate and/or enhance proliferation or differentiation and/or growth and/or motility of cells expressing platelet-derived growth factor C receptor. The cDNA and deduced amino acid sequences are provided for human and murine platelet-derived growth factor C (PDGF-C). Also provided are vectors and host cells expressing PDGF-C, antibodies, and heterodimers with other PDGF factors or vascular endothelial growth factor subunits. PDGF-C may be used to stimulate growth of connective tissue or wound healing, promoting fibroblast mitogenesis, inducing PDGF α -receptor activating, inhibiting tumor growth and identifying specific types of tumor, screening antagonists, inhibiting tissue remodeling during invasion of tumor cells, and treating fibrotic conditions.

L3 ANSWER 41 OF 41 MEDLINE on STN DUPLICATE 9

ACCESSION NUMBER: 86000696 MEDLINE DOCUMENT NUMBER: PubMed ID: 2994752

TITLE: Cultured endothelial cells do not respond to a

platelet-derived growth-factor-like protein in an autocrine

manner.

AUTHOR: Kazlauskas A; DiCorleto P E

CONTRACT NUMBER: HL-29582 (NHLBI)

M01 RR00210 (NCRR)

SOURCE: Biochimica et biophysica acta, (1985 Sep 30) 846 (3)

405-12

Journal code: 0217513. ISSN: 0006-3002.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198510

ENTRY DATE: Entered STN: 19900321

Last Updated on STN: 20000303 Entered Medline: 19851031

Cultured endothelial cells produce a growth factor similar or identical to AB platelet-derived growth factor (PDGF). Endothelial cells are able to proliferate in plasma-supplemented medium, while most nontransformed cells require serum-supplemented medium. Since PDGF is a major serum mitogen, we have tested the possibility that endothelial cells interact with and respond to the autologously produced PDGF-like (PDGF-c) protein. We have found that bovine aortic and rat heart endothelial cells express little or no cell surface PDGF receptors as determined by binding of pure 125I-PDGF. Treating these cells under acidic conditions, which release receptor-bound PDGF in control cells without affecting receptor function, did not reveal a population of cryptic receptors. addition, when rat heart endothelial cells were grown in the presence of an antibody to PDGF, proliferation was unimpaired, though no detectable free PDGF was present in the medium. An equivalent amount of antibody completely blocked the mitogenic response of human fibroblasts that had been preincubated for 1 h at 37 degrees C with an equivalent dose of PDGF. Thus, endothelial cells do not respond mitogenically in a manner that would be expected from the interaction of autologously produced PDGF with its cell surface receptor. Endothelial cells were detergent-solubilized and immobilized on nitrocellulose in an attempt to detect the presence of intracellular PDGF receptors. Specific binding of 125I-PDGF to adsorbed, solubilized bovine aortic or rat heart endothelial cells was undetectable, though significant binding to adsorbed, solubilized fibroblasts, used as a positive control, was observed. We conclude that endothelial cells do not have detectable intracellular PDGF receptors.

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SINCE FILE TOTAL ENTRY SESSION COST IN U.S. DOLLARS

49.13 49.34 FULL ESTIMATED COST

FILE ENTRY SESSIC. -6.57 SINCE FILE DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

CA SUBSCRIBER PRICE

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FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Dec 9, 2005 (20051209/UP).

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ANSWER 20 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN L3

ACCESSION NUMBER:

2003:892428 CAPLUS

DOCUMENT NUMBER:

139:359243

TITLE:

Compositions and methods for modulating vasculogenesis or angiogenesis with platelet-derived growth factor C

(PDGF-C) core protein domain

INVENTOR(S):

Li, Xuri; Eriksson, Ulf; Carmeliet, Peter; Collen,

Desire

PATENT ASSIGNEE(S):

Ludwig Institute for Cancer Research, USA

SOURCE:

U.S. Pat. Appl. Publ., 82 pp., Cont.-in-part of U.S.

Ser. No. 410,349.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|-----------|----------|
| | | | | - | |
| US 2003211994 | A1 | 20031113 | US 2002-303997 | | 20021126 |
| US 2004053837 | A1 | 20040318 | US 2003-439337 | | 20030516 |
| PRIORITY APPLN. INFO.: | | | US 1998-102461P | P | 19980930 |
| | | | US 1998-108109P | P | 19981112 |
| | | | US 1998-110749P | P | 19981203 |
| | | | US 1998-113002P | P | 19981218 |
| | | | US 1999-135426P | P | 19990521 |
| | | | US 1999-144022P | P | 19990715 |
| | | | US 1999-410349 | A2 | 19990930 |
| | | | US 2002-303997 | A2 | 20021126 |

A method for modulating vasculogenesis or angiogenesis using the core AB domain protein of PDGF-C, a new member of the PDGF/VEGF family of growth factors, or a homodimer or a heterodimer comprising the core domain. Also disclosed are pharmaceutical compns. comprising the core protein, nucleotide sequences encoding the protein, and uses thereof in medical and diagnostic applications.

ANSWER 21 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:334533 CAPLUS

DOCUMENT NUMBER:

138:349060

TITLE:

Methods for the production and regulation of the

receptor-binding specificity of platelet-derived growth factor C for the treatment of ischemia,

hypertrophy, fibrosis and tumorgenesis

INVENTOR(S):

Eriksson, Ulf; Fredriksson, Linda

PATENT ASSIGNEE(S):

Swed.

U.S. Pat. Appl. Publ., 68 pp., Cont.-in-part of U.S. SOURCE:

Ser. No. 852,209.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|----|----------|
| | | | | | |
| US 2003082670 | A1 | 20030501 | US 2002-131600 | | 20020425 |
| US 2002164687 | A1 | 20021107 | US 2001-852209 | | 20010510 |
| PRIORITY APPLN. INFO.: | | | US 1998-102461P | Ρ | 19980930 |
| | | | US 1998-108109P | Ρ | 19981112 |
| | | | US 1998-110749P | P | 19981203 |
| | | | US 1998-113002P | P | 19981218 |
| | | | US 1999-135426P | P | 19990521 |
| | | | US 1999-144022P | P | 19990715 |
| | | | US 1999-410349 | A2 | 19990930 |
| | | | US 2001-852209 | A2 | 20010510 |

PDGF-C, a new member of the PDGF/VEGF family of growth AB factors, is described, as well as nucleotide sequences, its method of production, antibodies and antagonists. Also disclosed are transfected and transformed host cells expressing same and pharmaceutical compns., and uses thereof in medical and diagnostic applications. Proteolytic processing of PDGF-C is accomplished by a serine protease. Methods for inhibiting PDGF-C activities and for treating disease caused by PDGF-C over-activity of over-expression are also disclosed. Exemplified are the production of anti-PDGF-C antibodies, VEGF and PDGF receptor subtypes binding ability and localization in the developing mouse embryo. Ability of PDGF-C to induce angiogenesis is also exemplified, with addnl. assays to be performed for the assessment of this PDGF-induced angiogenesis.

ANSWER 22 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN L3

ACCESSION NUMBER:

2003:300603 CAPLUS

DOCUMENT NUMBER:

138:326530

TITLE:

Method for stimulating connective tissue growth or

wound healing

INVENTOR(S):

Uutela, Marko; Eriksson, Ulf; Alitalo, Kari

PATENT ASSIGNEE(S):

Finland

SOURCE:

U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 86,623.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-------------------|----------|
| | | | | |
| US 2003073637 | A1 | 20030417 | US 2002-260539 | 20021001 |
| US 6706687 | B1 | 20040316 | US 1999-438046 | 19991110 |
| US 2002164710 | A1 | 20021107 | US 2002-86623 | 20020304 |
| US 2005209136 | A1 | 20050922 | US 2004-794392 | 20040308 |
| PRIORITY APPLN. INFO.: | | | US 1998-107852P P | 19981110 |
| | | | US 1998-113997P P | 19981228 |
| | | | US 1999-150604P P | 19990826 |

US 1999-157108P P 19991004 US 1999-157756P P 19991005 US 1999-438046 A2 19991110 US 2000-691200 B2 20001019 US 2002-86623 A2 20020304 US 2002-260539 A2 20021001

The invention features PDGF-D, a new member of the PDGF/VEGF family of growth factors, as well as the nucleotide sequence encoding it, methods for producing it, antibodies and other antagonists to it, transfected and transformed host cells expressing it, pharmaceutical compns. containing it, and uses thereof in medical and diagnostic applications, including methods for stimulating growth of a connective tissue or healing a wound in a mammal, which methods comprise administering to the mammal an effective amount of PDGF-D polypeptides or polynucleotides encoding the PDGF-D polypeptides.

L3 ANSWER 23 OF 41 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003268470 EMBASE

TITLE: Platelet-derived growth factor (PDGF)-C

, a PDGF family member with a vascular endothelial growth

factor-like structure.

AUTHOR: Reigstad L.J.; Sande H.M.; Fluge O.; Bruland O.; Muga A.;

Varhaug J.E.; Martinez A.; Lillehaug J.R.

CORPORATE SOURCE: J.R. Lillehaug, Dept. of Molecular Biology, HIB, University

of Bergen, Thormohlensgate 55, N-5020 Bergen, Norway.

johan.lillehaug@mbi.uib.no

SOURCE: Journal of Biological Chemistry, (9 May 2003) Vol. 278, No.

19, pp. 17114-17120.

Refs: 48

ISSN: 0021-9258 CODEN: JBCHA3

COUNTRY: United States
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 004 Microbiology

029 Clinical Biochemistry

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20030724

Last Updated on STN: 20030724

Platelet-derived growth factor (PDGF)-C is a novel AB member of the PDGF family that binds to PDGF $\alpha\alpha$ and $\alpha\beta$ receptors. The growth factor domain of PDGF-C (GFD-PDGF-C) was expressed in high yields in Escherichia coli and was purified and refolded from inclusion bodies obtaining a biologically active growth factor with dimeric structure. The GFD-PDGF-C contains 12 cysteine residues, and Ellman assay analysis indicates that it contains three intramonomeric disulfide bonds, which is in accordance with GFD-PDGF-C being a member of the cystine knot superfamily of growth factors. The recombinant GFD-PDGF-C was characterized by CD, fluorescence, NMR, and infrared spectroscopy. Together, our data indicate that GFD-PDGF-C is a highly thermostable protein that contains mostly β -sheet secondary structure and some (6%) α -helix structure. The structural model of PDGF-C, obtained by homology-based molecular modeling using the structural representatives of this family of growth factors, shows that GFD-PDGF-C has a higher structural homology to the vascular endothelial growth factor

than to PDGF-B. The modeled structure can give further insights into the

L3 ANSWER 24 OF 41 MEDLINE ON STN DUPLICATE 5
ACCESSION NUMBER: 2003398231 MEDLINE

ACCESSION NUMBER: 2003398231 MEDLED DOCUMENT NUMBER: PubMed ID: 12937299

function and specificity of this molecule.

TITLE: A fully human monoclonal antibody (CR002)

identifies PDGF-D as a novel mediator

of mesangioproliferative glomerulonephritis.

Ostendorf Tammo; van Roeyen Claudia R C; Peterson Jeffrey AUTHOR:

D; Kunter Uta; Eitner Frank; Hamad Avin J; Chan Gerlinde; Jia Xiao-Chi; Macaluso Jennifer; Gazit-Bornstein Gadi; Keyt Bruce A; Lichenstein Henri S; LaRochelle William J; Floege

Jurgen

CORPORATE SOURCE: Division Nephrology, University of Aachen, Germany.

Journal of the American Society of Nephrology: JASN, (2003 SOURCE:

Sep) 14 (9) 2237-47.

Journal code: 9013836. ISSN: 1046-6673.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTRY MONTH: 200402

Entered STN: 20030826 ENTRY DATE:

Last Updated on STN: 20040205

Entered Medline: 20040204

PDGF-B is of central importance in mesangioproliferative diseases. AB

PDGF-D, a new PDGF isoform, like PDGF-B, signals through

the PDGF betabeta-receptor. The present study first determined that

PDGF-D is mitogenic for rat mesangial cells and is not inhibited by a PDGF-B antagonist. Low levels of PDGF-D

mRNA were detected in normal rat glomeruli. After induction of

mesangioproliferative nephritis in rats by anti-Thy 1.1 mAb, glomerular

PDGF-D mRNA and protein expression increased

significantly from days 4 to 9 in comparison with nonnephritic rats. Peak

expression of PDGF-D mRNA occurred 2 d later than peak

PDGF-B mRNA expression. In addition, PDGF-D serum

levels increased significantly in the nephritic animals on day 7. For

investigating the functional role of PDGF-D,

neutralizing fully human mAb were generated using the XenoMouse

technology. Rats with anti-Thy 1.1-induced nephritis were treated on days

3 and 5 with different amounts of a fully human PDGF-DD-specific

neutralizing mAb (CR002), equal amounts of irrelevant control mAb, or PBS

by intraperitoneal injection. Specific antagonism of PDGF-

D led to a dose-dependent (up to 67%) reduction of glomerular cell

proliferation. As judged by double immunostaining for

5-bromo-2'-deoxyuridine and alpha-smooth muscle actin, glomerular

mesangial cell proliferation was reduced by up to 57%. Reduction of

glomerular cell proliferation in the rats that received CR002 was not

associated with reduced glomerular expression of PDGF-B mRNA.

PDGF-D antagonism also led to reduced glomerular

infiltration of monocytes/macrophages (day 5) and reduced accumulation of fibronectin (day 8). In contrast, no effect was noted in normal rats that

received an injection of CR002. These data show that PDGF-

D is overexpressed in mesangioproliferative states and can act as an auto-, para-, or even endocrine glomerular cell mitogen, indicating

that antagonism of PDGF-D may represent a novel

therapeutic approach to mesangioproliferative glomerulonephritides.

ANSWER 25 OF 41 MEDLINE on STN DUPLICATE 6

2003188236 MEDLINE ACCESSION NUMBER: PubMed ID: 12707385 DOCUMENT NUMBER:

PDGF-C expression in the developing and TITLE:

normal adult human kidney and in glomerular diseases.

Eitner Frank; Ostendorf Tammo; Kretzler Matthias; Cohen AUTHOR:

Clemens D; Eriksson Ulf; Grone Hermann-Josef; Floege Jurgen

Division of Nephrology and Immunology, Aachen University, CORPORATE SOURCE:

Pauwelsstrasse 30, 52074 Aachen, Germany. (ERCB-Consortium). feitner@ukaachen.de

Journal of the American Society of Nephrology: JASN, (2003 SOURCE:

May) 14 (5) 1145-53.

Journal code: 9013836. ISSN: 1046-6673.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200306

ENTRY DATE:

Entered STN: 20030423

Last Updated on STN: 20030626

Entered Medline: 20030625

PDGF-C is a new member of the PDGF-family and has AB

recently been identified as a rat mesangial cell mitogen. Its expression and function in human kidneys is unknown. Localization of PDGF-C protein was analyzed by immunohistochemistry using a rabbit polyclonal antibody directed against the core-domain of PDGF-C in human fetal kidneys (n = 8), normal adult

human kidneys (n = 9), and in renal biopsies of patients with IgAnephropathy (IgAN, n = 31), membranous nephropathy (MGN, n = 8), minimal change disease (MC, n = 7), and transplant glomerulopathy (TxG, n = 12).

Additionally, PDGF-C mRNA was detected in

microdissected glomeruli by real-time RT-PCR in cases of normal adult kidneys (n = 7), IgAN (n = 27), MGN (n = 11), and MC (n = 13). In the fetal kidney, PDGF-C localized to the developing

mesangium, ureteric bud epithelium, and the undifferentiated mesenchyme.

In the adult kidney, PDGF-C was constitutively

expressed in parietal epithelial cells of Bowman's capsule, tubular epithelial cells (loops of Henle, distal tubules, collecting ducts), and in arterial endothelial cells. A marked upregulation of glomerular PDGF-C protein was seen in MGN and TxG with a prominent

positivity of virtually all podocytes. In MC, PDGF-C

localized to podocytes in a more focal distribution. In MGN, increased glomerular PDGF-C protein expression was due to

increased mRNA synthesis as a 4.3-fold increase in PDGF-

C mRNA was detected in microdissected glomeruli from MGN compared with normal. PDGF-C protein was additionally

expressed in individual mesangial cells in TxG. Finally, upregulated PDGF-C protein expression was detected within sclerosing glomerular and fibrosing tubulointerstitial lesions in individual cases

from all analyzed groups. We conclude that PDGF-C is constitutively expressed in the human kidney and is upregulated in podocytes and interstitial cells after injury/activation of these cells.

ANSWER 26 OF 41 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on L3STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2003:71118 BIOSIS PREV200300071118

TITLE:

Growth factor homolog ZVEGF4.

AUTHOR (S):

Gilbert, Teresa [Inventor, Reprint Author]; Hart, Charles E. [Inventor]; Sheppard, Paul O. [Inventor]; Gilbertson,

Debra G. [Inventor] Seattle, WA, USA

ASSIGNEE: ZymoGenetics, Inc.

CORPORATE SOURCE:

PATENT INFORMATION: US 6495668 20021217

SOURCE:

Official Gazette of the United States Patent and Trademark

Office Patents, (Dec 17 2002) Vol. 1265, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE:

Patent English

LANGUAGE: ENTRY DATE:

Entered STN: 29 Jan 2003

Last Updated on STN: 29 Jan 2003

Polypeptide growth factors, methods of making them, polynucleotides AB encoding them, antibodies to them, and methods of using them are disclosed. Multimers of the polypeptides are also disclosed. The

polypeptides, multimeric proteins, and polynucleotides can be used in the study and regulation of cell and tissue development, as components of cell culture media, and as diagnostic agents.

L3 ANSWER 27 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:850240 CAPLUS

DOCUMENT NUMBER: 137:363702

TITLE: Platelet-derived growth factor D, DNA coding for it,

and pharmaceutical uses

INVENTOR(S): Eriksson, Ulf; Aase, Karin; Li, Xuri; Ponten, Annica;

Uutela, Marko; Alitalo, Kari; Oestman, Arne; Heldin,

Carl-Henrik

PATENT ASSIGNEE(S): Swed.

SOURCE: U.S. Pat. Appl. Publ., 60 pp., Cont.-in-part of U.S.

Ser. No. 691,200, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. DATE | 2 |
|------------------------|------|----------|------------------------|-------|
| | | | | |
| US 2002164710 | Al | 20021107 | US 2002-86623 2002 | 20304 |
| US 6706687 | B1 | 20040316 | US 1999-438046 1999 | 91110 |
| US 2003073637 | A1 | 20030417 | US 2002-260539 2002 | 21001 |
| US 2005209136 | A1 | 20050922 | US 2004-794392 2004 | 10308 |
| PRIORITY APPLN. INFO.: | | | US 1998-107852P P 1998 | 31110 |
| | | | US 1998-113997P P 1998 | 31228 |
| | | | US 1999-150604P P 1999 | 90826 |
| | | | US 1999-157108P P 1999 | 1004 |
| • | | | US 1999-157756P P 1999 | 1005 |
| | | | US 1999-438046 A2 1999 | 91110 |
| | | | US 2000-691200 B2 2000 | 1019 |
| | | | US 2002-86623 A2 2002 | |
| | | | US 2002-260539 A2 2002 | |

AB PDGF-D, a new member of the PDGF/VEGF family of polypeptide growth factors, is described, as well as nucleotide sequences encoding, methods for producing, pharmaceutical compns. containing this new growth factor, and its antibodies and other antagonists. Also disclosed are transfected and transformed host cells expressing PDGF-D, and uses thereof in medical and diagnostic applications. Fragments and homologs of PDGF-D are also covered by the invention.

L3 ANSWER 28 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:850239 CAPLUS

DOCUMENT NUMBER: 137:364421

TITLE: Protein and cDNA sequences of a novel human growth

factor sequence homolog

INVENTOR(S): Shigeta, Ron T.; Siani-Rose, Michael A.

PATENT ASSIGNEE(S): Affymetrix, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 45 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|-------------------------|--------|---------------|-----------------------|------|-------------|
| | | | | - | |
| US 2002164709 | A1 | 20021107 | US 2002-83853 | | 20020226 |
| PRIORITY APPLN. INFO.: | | | US 2001-272663P | P | 20010301 |
| AB The present inventi- | on pro | vides protein | and cDNA sequences of | of a | novel human |

protein which has sequence homol. with vascular endothelial growth factor, fallotein and platelet derived growth factor. Also provided by the invention are host cells and transgenic organisms comprising the gene delivery vehicle of the present invention. Also provided by the invention are computer readable media containing the polynucleotide or polypeptide sequences of the present invention. Further provided are methods of using these compns. for diagnosis and treatment of growth factor associated diseases.

L3 ANSWER 29 OF 41 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:850230 CAPLUS

DOCUMENT NUMBER: 137:363701

TITLE: Platelet-derived growth factor C, DNA encoding it and

its therapeutic and diagnostic uses

INVENTOR(S): Eriksson, Ulf; Aase, Karin; Li, Xuri; Ponten, Annica;

Uutela, Marko; Alitalo, Kari; Oestman, Arne; Heldin,

Carl-Henrik; Betsholtz, Christer

PATENT ASSIGNEE(S): Swed.

SOURCE: U.S. Pat. Appl. Publ., 82 pp., Cont.-in-part of U.S.

Ser. No. 410,349.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|----------|----------|-----------------|----|----------|
| | - | | | | |
| US 2002164687 | A1 | 20021107 | US 2001-852209 | | 20010510 |
| US 2003082670 | A1 | 20030501 | US 2002-131600 | | 20020425 |
| PRIORITY APPLN. INFO.: | | | US 1998-102461P | P | 19980930 |
| | | | US 1998-108109P | P | 19981112 |
| | | | US 1998-110749P | P | 19981203 |
| | | | US 1998-113002P | P | 19981218 |
| | | | US 1999-135426P | P | 19990521 |
| | | | US 1999-144022P | P | 19990715 |
| | | | US 1999-410349 | A2 | 19990930 |
| | | | US 2001-852209 | A2 | 20010510 |

AB PDGF-C, a new member of the PDGF/VEGF family of growth factors, is described, as well as the nucleotide sequence encoding it, methods for producing it, antibodies and other antagonists to it, transfected and transformed host cells expressing it, pharmaceutical compns. containing it, and uses thereof in medical and diagnostic applications. More specifically, the novel growth factor has the ability to stimulate and/or enhance proliferation or differentiation and/or growth and/or motility of cells expressing a PDGF-C receptor including, but not limited to, endothelial cells, connective tissue cells, myofibroblasts and glial cells,. Fragments and homologs of PDGF-C are also covered by the invention.

=> s l1 and glomerulonephritis

- 0 ZVEGF4
- 0 PDGF
- 16 C
- 0 PDGF(W) C
- 0 FALLOTEIN
- 0 SCDGFB
- 0 SCDGF
- 35 B
- 0 SCDGF(W) B
- 0 PDGF
- 27 D
- 0 PDGF(W) D

- 0 ZVEGF3 0 GLOMERULONEPHRITIS
- L4 0 L1 AND GLOMERULONEPHRITIS
- => s l1 and fibrosis
 - 0 ZVEGF4
 - 0 PDGF
 - 16 C
 - 0 PDGF(W) C
 - 0 FALLOTEIN
 - 0 SCDGFB
 - 0 SCDGF
 - 35 B
 - 0 SCDGF(W) B
 - 0 PDGF
 - 27 D

L5

- 0 PDGF(W) D
- 0 ZVEGF3
- 0 FIBROSIS
- 0 L1 AND FIBROSIS